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Aftermath of the Subprime Crisis: Reputational Damages Suffered by Major and Minor Rating Agencies

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The paper explores the reputational damages suffered by major and minor rating agencies as a consequence of the subprime crisis. The analysis is carried out through a standard event standard methodology on a sample of 1821 rating actions during the period November 2003 - November 2013. The evidence shows a lower market reaction to rating actions, especially when the evaluation is far away from the threshold between investment and speculative grade.

JEL Codes: G12, G14, G24

1. Introduction[i]

After the so-called subprime crisis, one of the main scapegoats identified by academicians and supervising authorities were the rating agencies. In the aftermath of the crisis, various critical analysis and a few trials focused on ascertaining the responsibilities of credit rating agencies (CRAs) and the roots of a disastrous performance that did not have equals in their history.

In this paper we want to gauge the extension of the reputational damage suffered by CRAs as a consequence of these events, by looking at the market's reaction to their rating announcements. We expect to find a lower market impact of rating actions after the crisis, due to a loss of trust in the neutrality and reliability of the rating evaluations. In other words, we expect the market to believe less blindly and, consequently, to react less strongly to rating agencies' credit opinions. In particular, we expect the phenomenon to be stronger when the certification role is less relevant and, thus, the regulation-induced trading is thinner.[ii]

This paper adds to previous literature on the topic by specifically exploring the effect of the subprime crisis on the credibility of rating agencies. To our knowledge the question hasn't yet been explored thoroughly. Furthermore, we carry out a comparison between major and minor rating agencies, whereas most academic research focused on the major players i.e. Moody's, Standard and Poor's and Fitch.

The rest of the paper is organized as follows. First, we briefly review the literature concerning rating agencies and their role in the financial markets. Then, we describe the size and the features of the sample used in the analysis. In the fourth paragraph we detail the methodology used and we comment on the expected sign of the independent variables included in econometric analysis. In the fifth paragraph we present our findings, We first focus on the two separate sub-samples of rating actions issued by major and minor

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agencies. We then perform the analysis of the entire sample looking for differences in the magnitude of the credibility loss depending on the nature of the rating agency issuing the announcement.

2. Literature Review

The majority of papers focused on the informative content of rating and aimed at measuring abnormal returns in market prices following various types of announcements made by agencies. In many empirical works the researchers took into consideration the abnormal returns preceding rating actions as well, so as to determine if and to what extent the market anticipates the judgments made by the agencies. In most recent works, alongside the informative content of rating, their "certification" role is explored. Since many laws and regulations – the most prominent example being Basel 2 Agreement – have recognized an official role to rating agencies' valuations, the crossing of certain thresholds affects the behavior of numerous restricted investors who may be forced to sell a downgraded security or may regain the right to buy an upgraded one (Steiner et Heinke, 2001; Micu et al., 2006; Kiff et al., 2012). In these cases, not only – or, even, not mainly – are the abnormal returns a consequence of the information content conveyed by the agency, but they are also a by-product of the gatekeeper status granted by the regulatory framework (Partnoy, 2006). Many papers also aimed at distinguishing the market impact of rating announcements on the basis of the motivation given by the agency (Goh and Ederington,1993), the concurrent diffusion of important information by the issuing company (Hand et al., 1992), the presence of a review/outlook anticipating the rating action by the same agency or any preceding announcement by another agency. Studies also differentiate on the basis of the type of the market analyzed, the extension of the event windows taken into consideration and the technicalities in the measurement of abnormal returns.

Just a few empirical works specifically focused on banks. From a theoretical point of view, some researchers maintain that rating actions should be able to convey less information to the market when concerning banks, since these financial intermediaries have to comply to enhanced transparency requirements and operate within the framework of strict prudential supervision (Richards and Deddouche, 1999). The opposite view is expressed by other researchers who highlight that authorities in charge of monitoring banks tend to withdraw bad news, in fear of creating panic among retail investors. If this is the case, rating agencies could disclose information that – even if known by the supervisory authorities – have not been adequately diffused to the market. In a way, the authorities' reluctance to pass on bad news could even amplify the effect of a downgrade on market prices (Gropp and Richards, 2001; Steiner and Heinke, 2001).

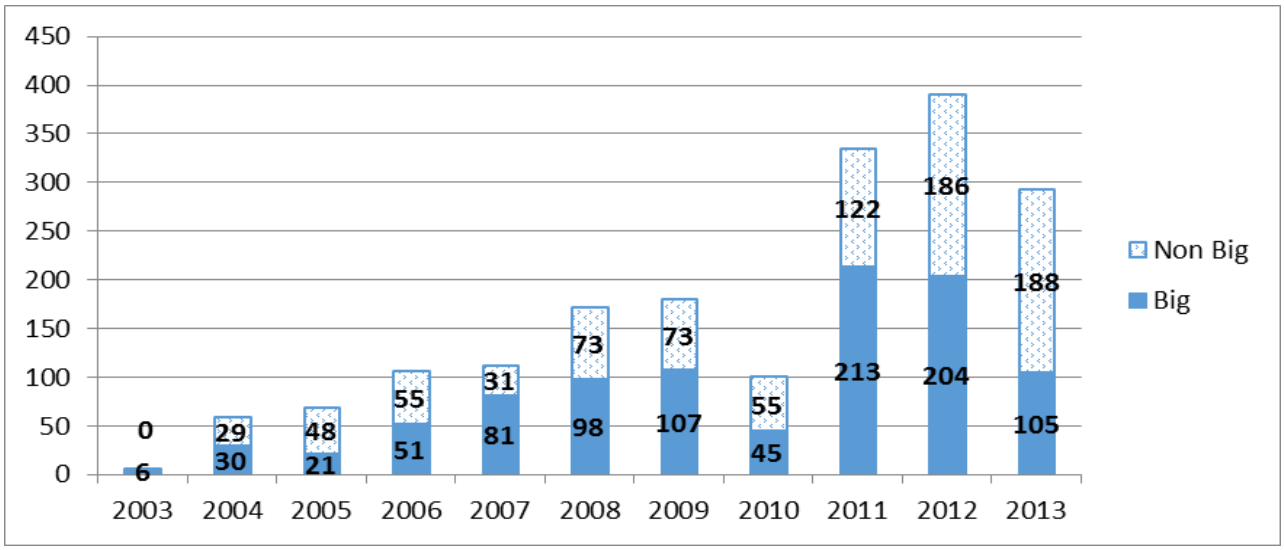
Our hypothesis is that – all other factors being equal – the subprime crisis has undermined the investors' trust in agencies' announcements. Therefore, we will include in our econometric models all factors that previous literature found to be relevant in explaining the magnitude of price reaction to rating actions. To test our hypothesis we will add time variables accounting for the period when the announcement was made in order to verify if the subprime crisis produced a durable effect.

3. Sample Description

The sample used in our empirical analysis consists of 1821 rating revisions issued by the three major CRAs (Standard & Poor 's, Moody's and Fitch) and by four "minor" CRAs in terms of market share (EJR, R&I, DBRS and JCR), during the period November 1st 2003 – November 1st 2013. The rating announcements concern a sample of 108 financial intermediaries – 43% from Europe, 34% from Asia, 23% from America – extrapolated from the STOXX 1800 Index. The analyzed events include downgrading and upgrading, confirmations on earlier ratings, insertion in the surveillance list with positive or negative watch and outlook. All data have been extracted from the Bloomberg database.

The distribution of the 1821 rating actions by year (Figure 1) and its subdivision into groups according to the type of CRAs (Big vs. Non-Big), suggests two conclusions: the first one concerns the dynamics which affected the rating actions, the second one concerns their composition. The constant increase of rating activities, briefly interrupted in 2010, indicates an intense information activity carried out by the CRAs. A significant role is also played by minor agencies, especially in the last three years. During the period under investigation, each issuer has been monitored by an average of 2.28 agencies; 21% of the analyzed financial intermediaries exclusively addressed to at least one of the Big Three; 31.5% were followed only by one or more minor agencies, while 47% of issuers got their ratings from both. It can be pointed out that more than half of the issuers has been evaluated by the two types of CRAs starting from 2011, possibly under the influence of the ESMA guidelines.

Figure 1: Distribution of ratings revisions (November 1st 2003 – November 1st 2013)



* The number of revisions of the year 2003 is abnormal because the survey takes into consideration only two months, as well as in the year 2013 when the events of the last two months are not taken into consideration.

The different alphanumeric characters used by all CRAs were translated into a single numerical scale, with the lowest value attributed to the highest grade of creditworthiness (AAA = 1; AA with positive watch = 1,75) and the highest value to the worst assessment (CC = 20; CC with negative watch = 20,25). This operation enables to compare how credit agencies have rated issuers over the years. Considering the average value of the 1595 ratings issued (outlooks excluded) and divided according to the nature of the agency they refer to, it seems that minor CRAs have been more severe in their judgments, with an

average rating value higher than the one recorded by major CRAs (Table 1). Minor CRAs' greater rigor is clear even when the indicator is considered by dividing the period under investigation into three sub-periods: the pre-crisis, crisis and post-crisis period. In all the three periods, the average value of the ratings assigned by the major agencies is more positive than the one issued by minor competitors. Furthermore, if the average rating value is disaggregated, it is clear that the greater rigor attributed to minor CRAs is mainly due to the EJR credit agency which differs from its competitors for having adopted the "subscriber-pay" model. Standard & Poor 's is the rating agency among the Big Three that issues the strictest ratings. By restricting the analysis to the issuers judged both by major and minor CRAs during the crisis and post-crisis period, the greater severity by EJR and Standard & Poor 's is confirmed.

Table 1 – Average ratings value

	# Obs.	Average rating	Maximum value	Minimum value	Standard deviation
Big	801	5.94	1	15.25	2.53
Non Big	794	6.56	2	20	2.79
Rating actions by period					
Pre-crisis Big	222	4.38	1	10	1.73
Pre-crisis Non Big	181	4.71	2	10	1.61
Crisis Big	142	4.99	2	11	1.49
Crisis Non Big	88	5.36	2.75	9	1.47
Post-crisis Big	437	7.05	1.25	15.25	2.60
Post-crisis Non Big	525	7.40	2	20	2.90
Rating revisions by agency					
DBRS	180	4.98	2	13	2.11
Moody's	230	5.21	1	14	2.59
R&I	249	5.36	3	10	1.37
JCR	32	5.59	2	9	2.10
Fitch	217	5.74	2	11	1.98
S&Ps	354	**6.54**	2	15.25	2.65
EJR	333	**8.40**	3	20	2.92

4. Methodology

In order to evaluate the reputational damage suffered by credit rating agencies we adopt a standard event study methodology. We measure the abnormal return for each rating change included in our sample in a 3-day event window centered on the announcement day [-1;1] using a market model with 500 day as estimation window. Such a short event window is in line with our research question, focused on the reputation of rating agencies and the information value of their actions. The price drift in the following days and weeks may be the result of autonomous analysis performed by investors, even if stimulated by the rating change, whereas the immediate return is more strictly dependent on the level of faith put in the agency's competence.

Since we are specifically interested in the magnitude of the price reactions to agencies' announcement, independently from its sign, we focus on the absolute value of cumulative abnormal return adopting an approach similar to Grothe (2013):

$$ABS\_CAR_{i;t} = \left|CAR_{i;t}\right|$$

We perform a multivariate econometric analysis of the 3-day cumulative abnormal returns associated to rating actions using the OLS method. As independent variables we consider a set of standard factors which proved to be relevant in past empirical work. Table 2 summarizes the definition and the expected signs of these regressors, in line with the main findings of specific literature on the topic.

Table 2 - Independent variables included in the econometric analysis – Definition and expected sign of the coefficient

Name	Definition	Expected sign
VA_CHGNOTCHES	Absolute value of the change in rating level, computed on the basis of a numerical conversion of the alpha-numerical scale used by CRAs, where the higher rating is equal to 1 and the lowest is equal to 20. The positive and negative watches are equal to -0,25 and +0,25 respectively.	+
CONTAMIN	Dummy variable which is equal to 1 if the distance between to following rating announcements on the same company is shorter than 30 days.	+
ANTICIP	Dummy variable which is equal to 1 when a downgrading or upgrading are preceded by a watch in the same direction.	-
RATING_BORDER	Dummy variable which is equal to 1 if the last or current ratings are between BBB+ and BB- and 0 otherwise.	+
DUMMY_WATCH	Dummy variable which is equal to 1 if the announcement consists in a credit warning instead of a downgrading or upgrading.	+
VIX	Value of the VIX index on the announcement day of the rating action.	+
DEVST	Standard deviation of the daily returns in the 50 working days preceding the rating action for the specific stock concerned by the announcement.	+
DUMMY_CRISIS	Dummy variable which is equal to 1 for all announcements between the 15th September 2008 and the 15th October 2009.	?
DUMMY_POSTCRISIS	Dummy variable which is equal to 1 for all announcements after the 15th October 2009.	+
NOBORDER_POST CRISIS	Dummy variable that is equal to 1 when the announcement is in the post crisis period and concerns an issuer that is not on the verge of the critical threshold between investment and junk grade.	-
BORDER_POST CRISIS	Dummy variable that is equal to 1 when the announcement is in the post crisis period and concerns an issuer that is on the verge of the critical threshold between investment and junk grade.	?
DUMMY_BIG	Dummy variable that is equal to 1 when the rating action is announced by one of the major three CRAs (S&Ps, Moody's and Fitch).	-
DUMMY_EJR	Dummy variable that is equal to 1 when the rating action is announced by EJR.	+
DUMMY_S&P	Dummy variable that is equal to 1 when the rating action is announced by Standard & Poor's.	?

As anticipated in the introduction, our contribution to literature lays not only in the inclusion of minor agencies – who are usually neglected – but also in the analysis of the reputational damage suffered by the rating industry as a consequence of the subprime crisis.

In order to gauge the reputational damage – and this is the core of our analysis – we consider two dummy variables: CRISIS and POST_CRISIS. The first assumes a value equal to 1 for all rating actions taking place between the 15th September 2008 and the 15th

October 2009; the second has a value equal to 1 for all dates after 16th October 2009 and 0 elsewhere. These dummies are the main instrument we use to gauge to reputation impact of the subprime crisis on rating agencies. The expected sign of the coefficient for the DUMMY_CRISIS is uncertain. On one side, after Lehman's collapse and the rapid downgrading of a huge mass of structured product, the market should have put less trust in the judgments of the agencies. On the other hand, during a crisis, the investors tend to be more sensitive to any kind of news and especially to bad news. Once the worst of the crisis was over, the decrease in level of trust and the consequent lower reactivity of the market to the information conveyed by credit rating agencies should be more evident. Thus, we expect a negative coefficient for the DUMMY_POSTCRISIS. In particular, we expect the phenomenon to manifest itself in a stronger way when the regulatory and psychological threshold of the junk level is far away. To test this aspect, we introduce two interaction variables accounting for the "borderline" and "not-borderline" status in the post-crisis period.

The inclusion of minor agencies in the sample of rating actions serves as a confirmation and reinforcement for the conclusions we draw. In particular, since their regulatory-driven role is less established, the information content of their announcements is potentially less blurred. Furthermore, since they were less directly involved in the subprime crisis, any credibility loss can be interpreted as a general mistrust towards the rating industry as a whole.

5. The Findings

5.1 Analysis of the CARs for the Rating Actions Announced by Moody's, S&Ps and Fitch

As already explained above, we start the analysis from the sub-sample of rating actions announced by the three most important agencies – Moody's, Standard & Poor's and Fitch – which were more directly involved in the subprime scandal and which may have suffered the greater reputational damage.

Table 3 summarizes the most interesting results of the analysis performed. The first analysis makes use of a restricted set of independent variables that are available for all the 961 rating events. All coefficients have the expected sign, in line with the evidence provided by previous literature, and are statistically significant. In particular, the abnormal return is positively related to the level of volatility, both at market and security-specific level. The DUMMY_POSTCRISIS – which is the core variable for our analysis – displays he expected negative sign and the coefficient is significant at the 5% confidence level.

Table 3 - Determinants of the ABS_CAR – Sample Big CRAs

	(1)	(2)	(3)	(4)	(5)
	Entire sample	Entire sample	Entire sample	Sub-sample CONTAMIN =0	Sub-sample: WATCH =1
C	-0,1578 (-0,308)	-0,314 (0,5467)	-0,733 (-0,919)	-0,472 (-0,627)	0,670 (0,673)
VA_CHGNOTHCES			0,642 (1,354)	0,314 (0,813)	0,508 (0,711)
CONTAMIN			-0,332 (-0,704)		-1,652*** (-2,649)
ANTICIP			-0,472 (-1,05)	-0,769* (-1,865)	
DUMMY_CRISIS	0,601 (0,754)	0,568 (0,4758)	0,008 (0,992)	0,009 (0,091)	-3,599*** (-2,50)
DUMMY_POSTCRISIS	-0,589** (-1,97)	-0,810*** (-2,73)			
RATING_BORDER		1,049*** (3,668)			
NOBORDER_POSTCRISIS			-1,515*** (-3,647)	-1,585*** (3,24)	-2,092*** (-2,352)
BORDER_POSTCRISIS			0,03 (0,05)	0,521 (1,60)	-0,733 (-0,713)
VIX	0,09*** (2,709)	0,101*** (2,875)	0,113*** (2,738)	0,1068** (2,287)	0,176*** (4,604)
DEVST	0,502** (3.64)	0,477*** (3,54)	0,529*** (3,522)	0,535*** (3,051)	0,633*** (3,718)
DUMMY_WATCH			0,557 (1,44)		
Adjusted R2	0,228	0,234	0,236	0,281	0,276
N. observations	961	961	718	515	243

The t-stat are reported in brackets under each coefficient. White heteroskedasticity-consistent standard errors and covariance.
* = significant at 10% level; ** = significant at 5% level; ***= significant at 1% level with a two-tailed test.

The second column details the results of an analysis where the set of independent variables is a little enriched, keeping the total number of observations to 961. In particular, we include the dummy RATING_BORDER that displays the expected positive sign and that is strongly significant. Furthermore, the t-stat of the DUMMY_POSTCRISIS increases. In the columns (3) to (5), we substitute the DUMMY_POSTCRISIS with two interaction factors that allow to distinguish – in the post-crisis period – the effect of rating actions near to the borderline between the speculative and investment grade from those concerning companies in a “safe zone”. The lack of trust should manifest in a stronger way when there is less regulation-induced trading. The results show that the absolute value of abnormal return is lower, in the post-crisis period, when the rating is far away from the threshold. On the contrary, there is no significant difference in the market reaction between the pre- and post-crisis periods when the current rating or the last available rating are near to the borderline. The DUMMY_CRISIS remains insignificant, whereas the VIX and DEVST coefficient display the expected sign and are strongly significant.

Column (3) also includes a larger set of independent variables, which proved to be relevant in past empirical works on the topic. Even if all factors present the expected sign, their statistical significance is low and the marginal increase in the explicative power of the regression, measured by the R-squared, is not sensible.

Column (4) restricts the analysis to the uncontaminated events i.e. the rating actions that are not preceded by another agency's announcement in the previous 30 days. Comparing column (3) and (4), the set of significant variables remains unvaried, but the R-squared of the regression increases to 28 per cent.

Finally, column (5) focuses on the credit warnings that in literature are often associated with a greater informative content for market participants. The number of available observations is 243. In this case, the negative coefficient of the CONTAMIN variable is significant and, thus, the credit watches that come soon after other announcements are associated to lower abnormal return. Both the DUMMY_CRISIS and NOBORDER_POSTCRISIS variables are significant and have the expected negative coefficient, signaling a reduced market impact of rating actions compared to the pre-crisis period.

In summary our analysis provides evidence in line with the previous literature as far all "traditional" variables are concerned. On the side of the credibility loss – the main focus of our interest – we can conclude that the major rating agencies have indeed suffered a reputation damage as a consequence of the subprime crisis that translates in a weaker market reaction to their announcements. This is particularly evident when the crossing of a regulatory threshold is not involved and, thus, when there is less market impact from restricted investors who are obliged to react independently from their trust in the informative content conveyed by the agency.

5.2 Analysis of the CARs for the Rating Actions Announced by the Minor CRAs

We conducted the analysis on the dependent ABS_CAR variable by testing the same independent variables used for the sample with the Big Three, in order to determine whether the independent variables exert similar effects or if there are any discrepancies. The results are detailed in Table 4.

The first set of regressors (1) shows the sign of the coefficients in line with our expectations, except in the case of DUMMY_CRISIS, whose value, however, is not significant. It can be noted that the adjusted R-squared has an explanatory value higher than the one recorded for the same case of the Big Three. By enriching the study with other variables, such as the combination of ratings in the critical area during the post-crisis period with ratings in the security area, and considering the same period, we found confirmation to our working hypothesis (2). As a result of the subprime mortgage crisis, the market proved to react less even to ratings issued by minor agencies, albeit with less intensity than their larger competitors. However, in the Non Big sub-sample the value is significant with a 5% only for the issuers in the security area. The negative sign for the border issuers, in contrast with what observed in the ratings issued by major CRAs, might be explained by a lower use in the certification activity of ratings issued by minor agencies. Proceeding the investigation with the third scenario, in which new independent variables have been added, the signs of the coefficients are in line with the expectations the expectations, but significance levels are acceptable for the DUMMY_WATCH and ANTICIP variables.

In the No Big sample, more than half of the issued ratings confirm the previous assessment. As they do not add new information, we decided to reiterate the analysis by restricting the sample to only those events that have led to a change in rating (4). The new combination of regressors manages to explain a higher value of extra-performance and highlights the less confidence of the market in minor CRAs in the post-crisis period. In fact, the BORDER_POSTCRISIS regressor shows a more accentuated negative coefficient than the one issued by the Big Three and with the same margin of error. The presence of a watch causes more accentuated changes in the extra-yield, as well as the absolute value of the rating change expressed in notches.

Table 4 – Determinants of the ABS_CAR – Sample minor CRAs and all CRAs

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Entire Sample	Entire Sample	Entire Sample	Sub-sample Dummy Stable=0	CRAs Big & Nobig, Dummy Stable=0	CRAs Big & Nobig	CRAs Big & Nobig
C	-1,524 (-2,419)	-1,493 (-2,326)	-1,966 (-2,67)	-6,812 (-3,287)	-1,999 (-1,799)	-0,882 (-1,552)	-0,792 (-1,517)
DUMMY_CRISIS	-1,748 (-1,291)	-1,353 (-0,997)	-1,729 (-1,311)	-2,870 (-1,121)	1,43 (1,28)	1,741 (1.84)*	1,332 (1,44)
DUMMY POSTCRISIS	-0,649** (-1,291)						
NOBORDER POSTCRISIS		-0,672 ** (-2,329)	-0,302 (-0,378)	-1,420** (-2,024)	-1,30*** (-3,167)	-0,79*** (-3,313)	-1,223*** (-3,742)
BORDER POSTCRISIS		-0,449 (-1,043)	-0,257 (-0,537)	-1,946*** (-2,627)	-0,376 (-0,766)	0,403 (1,152)	0,068 (0,154)
VIX	0,104*** (2,6361)	0,109*** (2,677)	0,104** (2,378)	0,226*** (2,894)	0,186*** (4,866)	0,177*** (5,799)	0,191*** (6,09)
DEVST	133,35*** (3,684)	125,13*** (3,395)	125,41*** (3,040)	82,45* (1,772)	18,47 (1,025)	1,71 (0,107)	2,78 (0,192)
VA CHANGE NOTCHES			1,154 (1,525)	4,404** (2,327)	2,462** (2,525)	1,317** (2,30)	
CONTAMIN			-0,334 (-0,419)				
DUMMY			2,762**	4,784**	2,231***	1,375**	1,476**

WATCH			(2,375)	(2,432)	(2,847)	(2,29)	(2,446)
DUMMY_ANTICIP			-2,384** (-0,749)		-0,043 (-0,085)	-0,258 (-0,503)	0,241 (0,496)
DUMMY_BIG					-1,576*** (-3,132)		
DUMMY S&P						-1,31*** (-2,842)	
DUMMY EJR							1,129*** (2,799)
Adjusted R-squared	0,278	0,283	0,313	0,364	0,248	0,214	0,201
N. observation	860	859	666	277	828	1220	1220

The t-stat are reported in brackets under each coefficient. White heteroskedasticity-consistent standard errors and covariance.
* = significant at 10% level; ** = significant at 5% level; ***= significant at 1% level with a two-tailed test.

Finally, by combining the two samples and analyzing the ABS_CAR in light of the independent variables already considered, to which we add the DUMMY_BIG variable, we can strengthen our conclusions that as a consequence of the subprime mortgages crisis, the market has lower confidence in the ratings issued by CRAs. The prices show lower returns especially where operators are not "forced" to act according to supervisory standards and regulations. In fact, the NOBORDER_POSTCRISIS variable appears with a high negative coefficient and with a margin of error inferior to 1%. Moreover, it seems that the reputational damage has a greater impact on major CRAs. In fact, the DUMMY_BIG coefficient is negative and highly significant under a statistical point of view.

As a robustness check we also tested if the relation holds true when limiting the analysis to the agencies that were found to be more severe in their judgments, i.e. Standard and Poor's among the majors and EJR among the minors (see paragraph 3). The DUMMY_S&P variable displays a negative coefficient, notwithstanding the lower generosity of its ratings. This evidence further confirms the alleged loss of credibility suffered by the major agencies. On the contrary, the DUMMY_EJR variable has a positive and highly significant coefficient. The high impact of EJR's announcements on extra-returns may also reflect the adoption of a subscriber-pay model and the consequent lower exposure to conflict of interests.

In summary, both on the minor agencies' subsample and on the entire sample of rating announcements included in the analysis, we find evidence in line with previous literature for what concerns the variables traditionally included in this type of empirical work. We also find evidence supporting our thesis of a credibility loss suffered by the agencies in the post subprime crisis period, measured in terms of a lower market reaction to rating changes, all other factors being equal. The comparison between major and minor agencies highlights a stronger reputational damage for the former which were more deeply involved in the scandal.

6. Conclusions

The results of the analysis confirm our hypothesis that the credibility of CRAs diminished after the subprime mortgage crisis. The impact of ratings actions on the prices of equity securities of financial intermediaries is lower in the post-crisis period, especially for those issuers with a high creditworthiness. Evidently, the informative role of CRAs is considered less important than it used to be, that is, the activity of rating agencies have a low informative value for this type of financial intermediaries. On the other hand, the prices of securities whose issuers have ratings previously defined as border, react to ratings actions even in the post-crisis period, probably due to the certification value of the rating. In fact, the sub-division of the sample, depending on whether the rating action comes from one of the three major agencies or from minor agencies, showed a different impact on the prices of securities called "border". In the first sub-sample, the extra-yield cumulated in the post-crisis period reacts more because of regulatory obligations, which generally refer to the evaluations expressed by larger agencies, although the effect is not significant. On the other hand, in the sample of ratings issued by minor CRAs, price variation is always limited in the post-crisis period. Even when rating confirmations have been excluded, the negative sign of the “border” shows a modest informative value, not being counterbalanced by the regulatory role of minor CRAs.

The evidence shown in the paper is in line with previous literature on the topic. To this literature we add our contribution focused on the reputational damage suffered by rating agencies as a consequence of the subprime crisis. The overall analysis of the ratings actions confirms a loss of credibility of the agencies, in particular, for those most involved in the financial crisis after the Lehman bankruptcy. The comparison between major and minor agencies enriches the analysis by highlighting a general mistrust towards rating industry, alongside a greater loss of credibility suffered by the major players. This conclusion is particularly strengthen by the comparison between two agencies adopting very different organizational models, Standard & Poor's and EJR. In fact, the analysis identifies opposite reactions of the market: lower in the first case and higher for the second agency.

Considering that in the future the regulatory role of CRAs will become increasingly limited, it will be necessary to verify if the loss of credibility will be recovered, thanks also to new regulatory measures and to the encouraged increased competition. As a future line of research, it will be interesting to test if the rating industry will be able to regain investors’ trust thanks to these regulatory news.

A potential weakness of the analysis lays in the lack of a variable measuring the distance between each rating new rating valuation issued and the average outstanding valuations by other agencies on the same issuer. This measure could be read as a proxy of the “information value” contained in the announcement. However, the inclusion of such an indicator in the current work would have reduced too much the sample of valid observations, since it would be applicable exclusively to issuers covered by more than one agencies in each period. Thus, a further increase in the sample would be needed in order to include this regressor.

Endnotes

[i] Paragraphs 1, 2, 4 and 5.1 are written by Paola De Vincentiis. Paragraphs 3, 5.2 and 6 are written by Patrizia Pia.

[ii] This paper is part of a larger research project undertaken by a research group of the University of Torino. Using a similar methodology and with the same research question, a different sample of rating actions concerning banks and non-financial companies belonging to the Euro Stoxx 50, Usa Stoxx and Asia-Pacific Stoxx was analyzed. The paper Damilano, Isaia, Rovera (2014) presents the results of the analysis, focusing in particular on the weight of geographical and sectorial cross-sectional differences.

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